Third Delta Conveyance Channel Federal Feasibility Study

Coastal Impact Assistance Program Funding Application



Submitted by: Restore or Retreat, Inc.

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- 1. Project title: Third Delta Conveyance Channel Federal Feasibility Study
- 2. Entity/Individual nominating the project: Restore or Retreat, Inc.
- 3. Contact information:

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- 4. Total CIAP funds requested: \$9,000,000.00, all or part, and can be incremental
- 5. Infrastructure funds proposed: n/a
- 6. Description and location of the project: Third Delta Conveyance Channel (TDCC) Feasibility Study, St. James, Assumption, Lafourche and Terrebonne Parishes, Louisiana. The TDCC concept includes the construction of a diversion structure on the west bank of the Mississippi River at a point located downstream of Donaldsonville, LA, and a 30-mile long channel from that point southeast. This main channel would parallel Bayou Lafourche and would bifurcate with one branch following the Bayou Lafourche east levee for an additional 35 miles, crossing the Gulf Intracoastal Water Way (GIWW) and entering Little Lake, where it would form the head of a subdelta lobe in Barataria. The second branch would cross the existing channel of Bayou Lafourche, swinging away from the levee south of the GIWW and proceeding south for a total distance of 30 miles from the bifurcation, where it would form a second subdelta lobe in Terrebonne Parish. (See attached delta building locations.)
- 7. Project type: Conservation, restoration, and protection of coastal area, including wetland (1)
- 8. Project justification: The Barataria and Terrebonne basins in Southeast Louisiana experience the highest rates of coastal land loss in the country at approximately 11 square miles per year. This loss represents over 60 percent of Louisiana's total land loss, and it is considered to be the area with the greatest need. Continued land loss is resulting in devastating ecological and economic impacts to the region, state and nation. The Third Delta Conveyance Channel (TDCC), a proposed project within Louisiana's Coast 2050 and LCA comprehensive restoration plans, is a large-scale diversion that would carry freshwater and sediments from the Mississippi River in the starved area to create subdelta lobes in the Barataria and Terrebonne basins. Based on the currently developing Wax Lake Outlet of the Atchafalaya, this proposed project would provide a long-term solution to Louisiana's catastrophic land loss by building land in the far reaches of the basins. The project would also provide related benefits of flood protection, reducing dredging needs in the Mississippi River, a continued freshwater supply, reduced anoxic conditions in the Gulf of Mexico, and a potential economic development corridor.
- 9. Project cost share (types and amounts of non-CIAP funds proposed, if any): Under the assumption of a 50/50 federal/local cost share and CIAP funding is able to be matched with other federal funding, 50 percent of cost (\$4,500,000) could potentially come from the U.S. Army Corps of Engineers.

History

In 2003, the Louisiana Department of Natural Resources (DNR) began a reconnaissance level study of the Third Delta Conveyance Channel, a large scale and long term restoration concept conceived by Drs. Gagliano and van Beek commonly referred to as "Third Delta" or TDCC. Third Delta was designed to replenish the Barataria-Terrebonne Estuaries which are suffering the greatest rate of coastal land loss in the nation through an infusion of much needed sediment, fresh water and nutrients. ROR helped to secure \$1 million dollars to complete this study, committed by then-secretary Jack Caldwell.

The first phase of the evaluation was to conclude if the proposed concept was viable (could it be constructed, can the channel transport the required sediment.) In June 2004, DNR released the Phase 1 final report of the study. With the flow of 300,000 cfs instead of the originally proposed 200,000 cfs, the conclusion clearly stated: The proposed delta building location will receive more sand, retain more sand, and build land faster than the Wax Lake Delta has built land in Atchafalaya Bay.

The second phase of the state's study concentrates on alternatives to the project, as well as the ecological and economical impacts. ROR and other area stakeholders were provided an update on the report's progress in late January. The alternatives, which were identified at a stakeholders' workshop held at Nicholls State University in May 2005 to kickoff Phase 2, largely center on the transport of riverine sediments via an extensive network of pipelines, with material dredged from either the Mississippi or Atchafalaya River. This report has not been officially released to the public, and the final report is expected by June.

Although no final conclusions or decisions will be drawn in the report from CH2MHILL, Restore or Retreat strongly believes the pipeline "alternative" is a significant near-term project that should be done in conjunction with a large-scale initiative like Third Delta, but not in place of Third Delta. Pipelines can and should be a critical restoration strategy for our area, which loses 10 to 11 square miles of land a year. Pipelines can quickly rebuild a strong skeletal framework using natural ridges, promptly reduce land loss effects and provide critical natural protection; however, this new land must be maintained through freshwater and sediment diversions, such as the Third Delta, for the long term sustainability of the area.

Upon ROR's urging, in April 2004, DNR Secretary Scott Angelle penned a letter to Colonel Peter Rowan, District Engineer of the New Orleans District of the U.S. Army Corps on Engineers (USACE) to confirm his request to develop a Project Management Plan (PMP) for a feasibility study to investigate the Third Delta and associated alternatives (attached.) Angelle wrote: "As conceived, the TDCC has the great potential to restore these areas, and the benefits and impacts of this project must fully be explored as part of the coastal restoration program." Angelle also offered his department to be the local sponsor of the USACE feasibility study.

The estimated cost of the Third Delta Feasibility study is \$9,000,000. This cost is based on discussions with Project Managers at the U.S. Army Corps of Engineers, New Orleans District and comparisons to other ecosystem restoration and flood control projects in South Louisiana. Comparisons were made to the Lower Atchafalaya study, the Morganza to the Gulf Flood Protection System and the Donaldsonville to the Gulf Flood Protection System.

Third Delta has long been championed by ROR and residents throughout the southeast Louisiana as a critical long-term restoration project for the region, and the concept and its study has been part of the Coast 2050 plan, the \$14 billion plus Louisiana Coastal Area (LCA) study, and the \$1.9 billion near-term LCA study. The hurricane season of 2005 reinforced the need for healthy coastal wetlands to provide natural hurricane and flood protection, and increased the urgency for large-scale projects like the Third Delta. Critical oil and gas infrastructure, as well as the delicate seafood and agriculture industries are not only the center of our local economy, but the economies of the state and nation as well. We must accomplish quick, near term restoration results through projects such as pipeline transfer, but we must also continue to study and construct projects with long term, lasting effects to protect these vital industries and infrastructure, and the communities and cultures that are intrinsically linked.

Proposed Delta Building Locations

